



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5 CHICAGO REGIONAL LABORATORY  
536 SOUTH CLARK STREET  
CHICAGO, ILLINOIS 60605

Date: 1/10/2017

Subject: Review of Region 5 Data for USS Lead Residential Area, East Chicago IN

To: Superfund, US EPA Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604

From: Colin Breslin, Chemist  
US EPA Region 5 Chicago Regional Laboratory

The data transmitted under this cover memo successfully passed CRL's data review procedures as documented in the current Quality Management Plan and applicable Standard Operating Procedures. In accordance with the EPA QA/G-8 *Guidance on Environmental Data Verification and Data Validation* and the U.S. EPA Region 5 RMD QMP, CRL performs data verification on all the data generated internally. CRL does not perform data validation or quality assessment procedures.

This report was reviewed and the information provided herein accurately represents the analysis performed.

X

**COLIN BRESLIN**

Digitally signed by COLIN BRESLIN  
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff,  
cn=COLIN BRESLIN, dnQualifier=0000051119  
Date: 2017.01.10 09:58:58 -06'00'

Please contact the analyst with any technical report issues, Robert Thompson at (312)-353-9078 for sample project concerns, and Sylvia Griffin at (312)-353-9073 with data transmittal questions. Thank you.

Attached are Results for: USS Lead Residential Area, East Chicago IN

\_\_\_\_\_  
Data Coordinator and Date Transmitted

Analyses included in this report:

Alkalinity



Environmental Protection Agency Region5  
**Chicago Regional Laboratory**

536 South Clark Street, Chicago, IL 60605  
Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5  
77 West Jackson Boulevard  
Chicago IL, 60604

Project: USS Lead Residential Area, East Chicago IN  
Project Number: [none]  
Project Manager: Tim Drexler

**Reported:**  
Jan-10-17 09:53

## Analysis Case Narrative

### General Information

Five water samples for the analysis of Alkalinity were received at the Chicago Regional Laboratory(CRL) on December 23, 2016 for the project USS Lead Residential Area East Chicago IN. The samples met the preservation requirement upon receipt. The samples were analyzed within the 14 day hold time, except for two samples, which are expounded on below. The designated analyst, Colin Breslin, can be reached at 312-886-2912.

The samples were prepared and analyzed according to CRL SOP A1005 Version#3 (based on SM 2320B).

**Note: supporting data and documents are archived with work order1612017.**

### Sample Analysis and Results

The data reported herein meets the requirements of the CRL analytical SOP used for analysis and any laboratory specifications stated in the Quality Assurance Project Plan(QAPP) U.S. Smelter and Lead Residential Area Superfund Site, dated September 27, 2016. Except for the samples analyzed past holding time, which are detailed below under Quality Control. The QAPP is archived in the CRL share drive as "USS Lead QAPP Water Ver1-2.pdf".

### Quality Control

All Quality Control (QC) audits were within CRL limits for the requested analytes or did not result in qualification of the data, except as follows:

#### Hold Time:

Samples with laboratory identification numbers 1612018-21 and 1612019-21 were analyzed past the 14 day hold time. These results are flagged as "J - The identification of the analyte is acceptable; the reported value is an estimate". No additional impacts are expected for the overall dataset.



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**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DS002-3066-2	1612018-21	Water	Dec-13-16 09:14	Dec-23-16 09:40
DS002-3332-2	1612019-21	Water	Dec-13-16 08:15	Dec-23-16 09:40
DS002-3074-2	1612020-25	Water	Dec-20-16 14:16	Dec-23-16 09:29
DS002-3037-2	1612021-25	Water	Dec-19-16 15:16	Dec-23-16 09:40
DS002-3226-2	1612022-22	Water	Dec-17-16 09:13	Dec-23-16 09:28



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**Alkalinity by SM 2320B**  
**US EPA Region 5 Chicago Regional Laboratory**

DS002-3066-2 (1612018-21)

Matrix: Water

Sampled: Dec-13-16 09:14

Received: Dec-23-16 09:40

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Alkalinity	110	J		20	mg CaCO3/L	1	B16L032	Dec-29-16	Dec-29-16

DS002-3332-2 (1612019-21)

Matrix: Water

Sampled: Dec-13-16 08:15

Received: Dec-23-16 09:40

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Alkalinity	110	J		20	mg CaCO3/L	1	B16L032	Dec-29-16	Dec-29-16

DS002-3074-2 (1612020-25)

Matrix: Water

Sampled: Dec-20-16 14:16

Received: Dec-23-16 09:29

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Alkalinity	110			20	mg CaCO3/L	1	B16L032	Dec-29-16	Dec-29-16

DS002-3037-2 (1612021-25)

Matrix: Water

Sampled: Dec-19-16 15:16

Received: Dec-23-16 09:40

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Alkalinity	100			20	mg CaCO3/L	1	B16L032	Dec-29-16	Dec-29-16

DS002-3226-2 (1612022-22)

Matrix: Water

Sampled: Dec-17-16 09:13

Received: Dec-23-16 09:28

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Alkalinity	110			20	mg CaCO3/L	1	B16L032	Dec-29-16	Dec-29-16



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**Alkalinity by SM 2320B - Quality Control**  
**US EPA Region 5 Chicago Regional Laboratory**

**Batch B16L032 - General Preparation**

Blank (B16L032-BLK1)

Prepared & Analyzed: Dec-29-16

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Alkalinity	U	U		20	mg CaCO3/L						

Duplicate (B16L032-DUP1)

Source: 1612017-19

Prepared & Analyzed: Dec-29-16

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Alkalinity	72			20	mg CaCO3/L		72			0.363	5

Duplicate (B16L032-DUP2)

Source: 1612018-21

Prepared & Analyzed: Dec-29-16

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Alkalinity	110			20	mg CaCO3/L		110			2.36	5

Reference (B16L032-SRM1)

Prepared & Analyzed: Dec-29-16

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Total Alkalinity	99				mg CaCO3/L	99.60		99.0%	90.4-108.4		



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**Notes and Definitions**

J The identification of the analyte is acceptable; the reported value is an estimate.  
U Not Detected  
NR Not Reported  
Q QC limit Exceeded